

NAME: _____

DATE: _____

Math 9 Unit 1.1 to 1.2 Review (No Calculators)

1. Circle all the perfect squares. Then write it as a square of another integer.

a) 0	b) 1	c) 10	d) 121	e) 7^2	f) 17
g) 2025	h) $\frac{12}{27}$	i) 120	j) $\frac{23}{49}$	k) 64	l) $\frac{25}{36}$
m) $\frac{32}{128}$	n) 144	o) 145	p) $\frac{64}{50}$	q) 391	r) 169
s) 289	t) $\frac{1}{4}$	u) 251	v) 256	w) 125	x) $\frac{98}{162}$

2. Circle all the mistakes that you see in each statement. Write the reason why on the right

a) estimate: $\sqrt{\frac{15}{10}} = \sqrt{\frac{16}{9}}$	e) estimate: $\sqrt{\frac{8}{10}} \approx \sqrt{\frac{9}{9}}$
b) step 1: $\sqrt{\frac{24}{51}} \approx \sqrt{\frac{25}{49}}$ step 2: $\sqrt{\frac{25}{49}} = \sqrt{\frac{5}{7}}$ step 3: $\sqrt{\frac{24}{51}} \approx \sqrt{\frac{5}{7}}$	f) step 1: $\sqrt{\frac{48}{79}} \approx \sqrt{\frac{49}{81}}$ step 2: $\sqrt{\frac{49}{81}} = \frac{7}{9}$ step 3: $\sqrt{\frac{48}{79}} = \frac{7}{9}$
c) estimate: $\sqrt{\frac{33}{48}} \approx \sqrt{\frac{25}{49}}$	g) step 1: $\sqrt{\frac{5}{37}} \approx \sqrt{\frac{4}{36}}$ step 2: $\sqrt{\frac{4}{36}} = \frac{2}{6} = \frac{1}{3}$ step 3: $\sqrt{\frac{5}{37}} \approx 0.3$

3. Estimate each of the following square roots

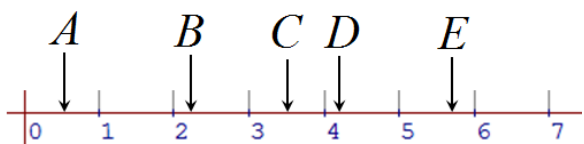
a) $\sqrt{4900}$	b) $\sqrt{90000}$	c) $\sqrt{638799}$	d) $\sqrt{2487}$
e) $\sqrt{0.009}$	f) $\sqrt{0.0025}$	g) $\sqrt{0.35}$	h) $\sqrt{0.000079}$

l) $\sqrt{\frac{37}{79}}$	j) $\sqrt{\frac{7}{15}}$	k) $\sqrt{\frac{13}{19}}$	l) $\sqrt{\frac{11}{27}}$
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4. Given that “a” and “b” are integers that are the closest to the square root in the middle. Find the appropriate values of “a” and “b” . Then give an estimate of the square root to one decimal place.

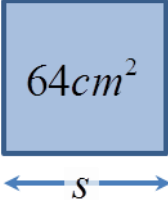
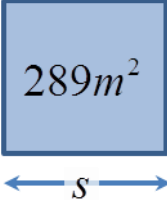
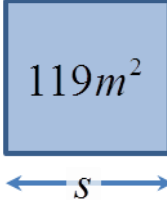
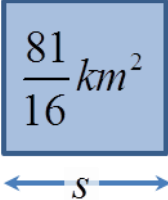
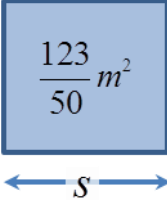
a) $a < \sqrt{17} < b$ $a = \quad b =$	b) $a < \sqrt{63} < b$ $a = \quad b =$	c) $a < \sqrt{110} < b$ $a = \quad b =$	d) $a < \sqrt{34} < b$ $a = \quad b =$
e) $a < \sqrt{89} < b$ $a = \quad b =$	f) $a < \sqrt{212} < b$ $a = \quad b =$	g) $a < \sqrt{156} < b$ $a = \quad b =$	h) $a < \sqrt{197} < b$ $a = \quad b =$

5. Given each square root, indicate which letter on the number line it is closest to.



a) $\sqrt{\frac{22}{5}}$	b) $\sqrt{\frac{34}{6}}$	c) $\sqrt{\frac{8}{33}}$	d) $\sqrt{\frac{30}{7}}$	e) $\sqrt{\frac{47}{5}}$
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6. Given the area of each of the square, find the side length. Remember to indicate the units

a) 	b) 	c) 
d) 	e) 	f) 